

```

FFF FFFF FFFF FFFF FFFF      111      111      XXX      XXX
FFF FFFF FFFF FFFF FFFF      111      111      XXX      XXX
FFF FFFF FFFF FFFF FFFF      111      111      XXX      XXX
FFF      111111      111111      XXX      XXX
FFF      111111      111111      XXX      XXX
FFF      111111      111111      XXX      XXX
FFF      111      111      XXX      XXX
FFF      111      111      XXX      XXX
FFF      111      111      XXX      XXX
FFFFFFFF FFFF      111      111      XXX      XXX
FFFFFFFF FFFF      111      111      XXX      XXX
FFFFFFFF FFFF      111      111      XXX      XXX
FFF      111      111      XXX      XXX
FFF      111      111      XXX      XXX
FFF      111      111      XXX      XXX
FFF      111      111      XXX      XXX
FFF      111      111      XXX      XXX
FFF      111      111      XXX      XXX
FFF      111      111      XXX      XXX
FFF      111111111      111111111      XXX      XXX
FFF      111111111      111111111      XXX      XXX
FFF      111111111      111111111      XXX      XXX

```

.....

```
GGGGGGGG  EEEEEEEEEE  TTTTTTTTTT  FFFFFFFFFF  IIIIII  BBBBBBBB
GGGGGGGG  EEEEEEEEEE  TTTTTTTTTT  FFFFFFFFFF  IIIIII  BBBBBBBB
GG        EE        TT        FF        II        BB      BB
GG        EE        TT        FF        II        BB      BB
GG        EE        TT        FF        II        BB      BB
GG        EE        TT        FF        II        BB      BB
GG        EEEEEEEE  TT        FFFFFFFF  II        BBBBBBBB
GG        EEEEEEEE  TT        FFFFFFFF  II        BBBBBBBB
GG  GGGGGG  EE        TT        FF        II        BB      BB
GG  GGGGGG  EE        TT        FF        II        BB      BB
GG      GG  EE        TT        FF        II        BB      BB
GG      GG  EE        TT        FF        II        BB      BB
GGGGGG  EEEEEEEEEE  TT        FF        IIIIII  BBBBBBBB
GGGGGG  EEEEEEEEEE  TT        FF        IIIIII  BBBBBBBB
                                     ....
                                     ....
                                     ....
                                     ....
```

```
LL        IIIIII  SSSSSSSS
LL        IIIIII  SSSSSSSS
LL        II      SS
LL        II      SS
LL        II      SS
LL        II      SS
LL        II      SSSSSS
LL        II      SSSSSS
LL        II      SS
LL        II      SS
LL        II      SS
LL        II      SS
LLLLLLLLLL  IIIIII  SSSSSSSS
LLLLLLLLLL  IIIIII  SSSSSSSS
```

```
0001 0 MODULE GETFIB (  
0002 0     LANGUAGE (BLISS32),  
0003 0     IDENT = 'V04-000'  
0004 0 ) =  
0005 1 BEGIN  
0006 1  
0007 1  
0008 1 *****  
0009 1 *  
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0026 1 *  SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.  
0027 1 *  
0028 1 *****  
0029 1 *****  
0030 1  
0031 1 ++  
0032 1  
0033 1 FACILITY: F11ACP Structure Level 2  
0034 1  
0035 1 ABSTRACT:  
0036 1  
0037 1     This routine obtains the address of the FIB for this operation.  
0038 1  
0039 1 ENVIRONMENT:  
0040 1  
0041 1     STARLET operating system, including privileged system services  
0042 1     and internal exec routines.  
0043 1  
0044 1 --  
0045 1  
0046 1  
0047 1 AUTHOR: Andrew C. Goldstein, CREATION DATE: 7-Jan-1977 01:02  
0048 1  
0049 1 MODIFIED BY:  
0050 1  
0051 1     V03-005 LMP0219 L. Mark Pilant, 24-Mar-1984 23:15  
0052 1     Preset FIB$L_ACL_STATUS to SS$NORMAL.  
0053 1  
0054 1     V03-004 ACG0408 Andrew C. Goldstein, 20-Mar-1984 17:49  
0055 1     Make APPLY_RVN and DEFAULT_RVN macros  
0056 1  
0057 1     V03-003 CDS0002 Christian D. Saether 18-Jan-1984
```



GETFIB  
V04-000

M 11  
16-Sep-1984 00:32:18  
14-Sep-1984 12:30:28

VAX-11 Bliss-32 V4.0-742  
DISK\$VMSMASTER:[F11X.SRC]GETFIB.B32:1  
Page 2  
(1)

```

58      0058 1 | Modify interface to APPLY_RVN.
59      0059 1 |
60      0060 1 | V03-002 CDS0001 Christian D. Saether 30-Dec-1983
61      0061 1 | Use L_NORM linkage and BIND_COMMON macro.
62      0062 1 |
63      0063 1 | V03-001 ACG0358 Andrew C. Goldstein, 15-Sep-1983 11:44
64      0064 1 | Remove -1,-1 DID conversion to MFD
65      0065 1 |
66      0066 1 | V02-005 ACG0238 Andrew C. Goldstein, 10-Dec-1981 14:31
67      0067 1 | Allow dummy file ID of -1,-1,-1
68      0068 1 |
69      0069 1 | V02-004 STJ34965 Steven T. Jeffreys, 28-Feb-1981
70      0070 1 | Temporary fix to clear FIB$V NOCHARGE bit to prevent
71      0071 1 | users from bypassing diskquota charging.
72      0072 1 |
73      0073 1 | V02-003 ACG0167 Andrew C. Goldstein, 10-Oct-1978 20:00
74      0074 1 | Previous revision history moved to [F11B.SRC]F11B.REV
75      0075 1 | **
76      0076 1 |
77      0077 1 |
78      0078 1 | LIBRARY 'SYSS$LIBRARY:LIB.L32';
79      0079 1 | REQUIRE 'SRC$:FCPDEF.B32';

```

```

81 1070 1 GLOBAL ROUTINE GET_FIB (ABD) : L_NORM =
82 1071 1
83 1072 1 ++
84 1073 1
85 1074 1 FUNCTIONAL DESCRIPTION:
86 1075 1
87 1076 1 This routine obtains the address of the FIB for this operation.
88 1077 1 It copies the FIB from the buffer packet into local storage
89 1078 1 and zero extends it to maximum length.
90 1079 1
91 1080 1 CALLING SEQUENCE:
92 1081 1 GET_FIB (ARG1)
93 1082 1
94 1083 1 INPUT PARAMETERS:
95 1084 1 ARG1: buffer descriptor list
96 1085 1
97 1086 1 IMPLICIT INPUTS:
98 1087 1 CURRENT_WINDOW: address of user's window or 0
99 1088 1 IO_PACKET: address of user's I/O packet
100 1089 1
101 1090 1 OUTPUT PARAMETERS:
102 1091 1 NONE
103 1092 1
104 1093 1 IMPLICIT OUTPUTS:
105 1094 1 NONE
106 1095 1
107 1096 1 ROUTINE VALUE:
108 1097 1 address of FIB
109 1098 1
110 1099 1 SIDE EFFECTS:
111 1100 1 file ID may be written into FIB
112 1101 1 channel window pointer write-back inhibited
113 1102 1 result string buffers zeroed
114 1103 1
115 1104 1 --
116 1105 1
117 1106 2 BEGIN
118 1107 2
119 1108 2 MAP
120 1109 2 ABD : REF BBLOCKVECTOR [,ABD$C_LENGTH];
121 1110 2 ! buffer descriptors
122 1111 2
123 1112 2 LOCAL
124 1113 2 FCB : REF BBLOCK, ! FCB of file
125 1114 2 FIBL; ! length of user FIB
126 1115 2
127 1116 2 BIND_COMMON;
128 1117 2
129 1118 2
130 1119 2 ! Get the length of the user-supplied FIB. If there is a window,
131 1120 2 ! and there is no user FIB, use the file ID from
132 1121 2 ! the window's FCB. Also use the FCB's file ID if the file number
133 1122 2 ! in the user FIB is zero.
134 1123 2
135 1124 2
136 1125 2 FIBL = .ABD[ABD$C_FIB, ABD$W_COUNT];
137 1126 2
```

```
138 1127 2 CH$COPY (.FIBL,
139 1128 2     .ABD[ABD$C_FIB, ABD$W_TEXT] + ABD[ABD$C_FIB, ABD$W_TEXT] + 1,
140 1129 2     0,
141 1130 2     FIB$C_LENGTH,
142 1131 2     LOCAL_FIB);
143 1132 2 CURRENT_FIB = LOCAL_FIB;
144 1133 2
145 1134 2 LOCAL_FIB[FIB$L_ACL_STATUS] = SS$_NORMAL;           ! Preset to success
146 1135 2
147 1136 2 ! If a non-zero directory ID is present, signal its presence in the
148 1137 2 ! cleanup flags.
149 1138 2
150 1139 2
151 1140 2 IF .LOCAL_FIB[FIB$W_DID_NUM] NEQ 0
152 1141 2 OR .LOCAL_FIB[FIB$W_DID_RVN] NEQ 0
153 1142 2 THEN
154 1143 2     BEGIN
155 1144 2         CLEANUP_FLAGS[CLF_DIRECTORY] = 1;
156 1145 2         APPLY_RVN (LOCAL_FIB[FIB$W_DID_RVN], .CURRENT_RVN);
157 1146 2     END;
158 1147 2
159 1148 2 IF .CURRENT_WINDOW NEQ 0
160 1149 2 THEN
161 1150 2     BEGIN
162 1151 2         FCB = .CURRENT_WINDOW[WCB$L_FCB];
163 1152 2         IF .LOCAL_FIB[FIB$W_FID_NUM] EQL 0
164 1153 2         AND .LOCAL_FIB[FIB$W_FID_RVN] EQL 0
165 1154 2         THEN CH$MOVE (FIB$S_FID, FCB[FCB$W_FID], LOCAL_FIB[FIB$W_FID]);
166 1155 2     END;
167 1156 2
168 1157 2 ! Default the RVN in the file ID to the RVN of the directory file, if given;
169 1158 2 ! else default to the current RVN.
170 1159 2
171 1160 2
172 1161 2 IF .LOCAL_FIB[FIB$B_FID_RVN] EQL 0
173 1162 2 THEN LOCAL_FIB[FIB$B_FID_RVN] = .LOCAL_FIB[FIB$B_DID_RVN];
174 1163 2 APPLY_RVN (LOCAL_FIB[FIB$W_FID_RVN], .CURRENT_RVN);
175 1164 2
176 1165 2 ! If the file ID in the FIB does not match that in the FCB, this operation
177 1166 2 ! is not on the open file; clear the FCB and window addresses (except in
178 1167 2 ! the case of a DEACCESS, in which we force the file ID to that of the open
179 1168 2 ! file and signal an error).
180 1169 2
181 1170 2
182 1171 2 IF .CURRENT_WINDOW NEQ 0
183 1172 2 THEN
184 1173 2     BEGIN
185 1174 2         IF .LOCAL_FIB[FIB$W_FID_NUM] NEQ .FCB[FCB$W_FID_NUM]
186 1175 2         OR .LOCAL_FIB[FIB$W_FID_RVN] NEQ .FCB[FCB$W_FID_RVN]
187 1176 2         THEN
188 1177 2             BEGIN
189 1178 2                 IF .IO_PACKET[IRP$V_FCODE] EQL IO$_DEACCESS
190 1179 2                 THEN
191 1180 2                     BEGIN
192 1181 2                         CH$MOVE (FIB$S_FID, FCB[FCB$W_FID], LOCAL_FIB[FIB$W_FID]);
193 1182 2                         ERR_STATUS (SS$_BADPARAM);
194 1183 2                     END
```



```
195      ELSE
196      BEGIN
197      CURRENT_WINDOW = 0;
198      PRIMARY_FCB = 0;
199      END;
200      END;
201      END
202      !! If there is no file open, there must be a minimum FIB.
203      !!
204      ELSE
205      BEGIN
206      IF .FIBL LSS FIB$C_ACCDATA
207      AND .IO_PACKET[IRP$V_FCODE] NEQ IO$_ACPCONTROL
208      THEN ERR_EXIT (SS$_INSFARG);
209      END;
210      !!
211      !! Clear FIB$V_NOCHARGE bit to prevent users from bypassing diskquota charging.
212      !!
213      LOCAL_FIB [FIB$V_NOCHARGE] = 0;
214      RETURN LOCAL_FIB;
215      RETURN LOCAL_FIB;
216      RETURN LOCAL_FIB;
217      RETURN LOCAL_FIB;
218      RETURN LOCAL_FIB;
219      RETURN LOCAL_FIB;
220      END;

! end of routine GET_FIB
```

.TITLE GETFIB  
.IDENT \V04-000\

.PSECT \$CODE\$,NOWRT,2

.ENTRY GET\_FIB, Save R2,R3,R4,R5,R6,R7,R8  
MOVAB 516(BASE), R6  
MOVL ABD, R0  
MOVZWL 10(R0), FIBL  
MOVAB 8(R0), R1  
MOVZWL (R1), R0  
MOVCS FIBL, 1(R1)[R0], #0, #64, (R6)  
  
MOVL R6, 16(BASE)  
MOVL #1, 52(R6)  
TSTW 10(R6)  
BNEQ 1\$  
TSTW 14(R6)  
BEQL 3\$  
BISB2 #64, (BASE)  
TSTB 14(R6)  
BNEQ 2\$  
MOVB -96(BASE), 14(R6)  
CMPB 14(R6), #1  
BNEQ 3\$  
TSTL -96(BASE)  
BNEQ 3\$

: 1070  
: 1114  
: 1125  
: 1128  
: 1127  
: 1132  
: 1134  
: 1140  
: 1141  
: 1144  
: 1145  
:

0040 8F 00 01 A140  
10 AA  
34 A6  
6A  
0E A6  
01  
0204 CA 9E 00000  
04 AC D0 00007  
0A A0 3C 0000B  
08 A0 9E 0000F  
61 3C 00013  
58 2C 00016  
66 0001F  
56 D0 00020  
01 D0 00024  
0A A6 B5 00028  
05 12 0002B  
0E A6 B5 0002D  
1C 13 00030  
40 8F 88 00032 1\$:  
0E A6 95 00036  
05 12 00039  
0E AA 90 0003B  
0E A6 91 00040 2\$:  
08 12 00044  
A0 AA D5 00046  
03 12 00049

				OE	A6	94	0004B		CLRB	14(R6)		
		50		OC	AA	D0	0004E	3\$:	MOVL	12(BASE), R0		1148
					14	13	00052		BEQL	4\$		
		57		18	A0	D0	00054		MOVL	24(R0), FCB		1151
				04	A6	B5	00058		TSTW	4(R6)		1152
					0B	12	0005B		BNEQ	4\$		
				08	A6	B5	0005D		TSTW	8(R6)		1153
					06	12	00060		BNEQ	4\$		
	04	A6	24	A7	06	28	00062		MOVC3	#6, 36(FCB), 4(R6)		1154
				50	0B	A6	9E	4\$:	MOVAB	8(R6), R0		1161
					60	95	0006C		TSTB	(R0)		
					04	12	0006E		BNEQ	5\$		
				60	OE	A6	90	00070	MOVB	14(R6), (R0)		1162
					60	95	00074	5\$:	TSTB	(R0)		1163
					04	12	00076		BNEQ	6\$		
				60	A0	AA	90	00078	MOVB	-96(BASE), (R0)		
				01	60	91	0007C	6\$:	CMPB	(R0), #1		
					07	12	0007F		BNEQ	7\$		
					A0	AA	D5	00081	TSTL	-96(BASE)		
					02	12	00084		BNEQ	7\$		
					60	94	00086		CLRB	(R0)		
				OC	AA	D5	00088	7\$:	TSTL	12(BASE)		1171
					2E	13	0008B		BEQL	10\$		
			24	A7	04	A6	B1	0008D	CMPW	4(R6), 36(FCB)		1174
					06	12	00092		BNEQ	8\$		
			28	A7	60	B1	00094		CMPW	(R0), 40(FCB)		1175
					37	13	00098		BEQL	11\$		
				50	90	AA	D0	0009A	8\$:	MOVL	-112(BASE), R0	1178
34				06	00	ED	0009E		CMPZV	#0, #6, 32(R0), #52		
					10	12	000A4		BNEQ	9\$		
					06	28	000A6		MOVC3	#6, 36(FCB), 4(R6)		1181
				24	A7	80	AA	E9	000AC	BLBC	-128(BASE), 11\$	1182
				21		14	B0	000B0	MOVW	#20, -128(BASE)		
			80	AA	1B	11	000B4		BRB	11\$		1178
					08	AA	7C	000B6	9\$:	CLRQ	8(BASE)	1187
					16	11	000B9		BRB	11\$		1174
				0A	58	D1	000BB	10\$:	CMPL	FIBL, #10		1197
					11	18	000BE		BGEQ	11\$		
				50	90	AA	D0	000C0	MOVL	-112(BASE), R0		1198
38				06	00	ED	000C4		CMPZV	#0, #6, 32(R0), #56		
					05	13	000CA		BEQL	11\$		
					0114	8F	BF	000CC	CHMU	#276		1199
						04	000D0		RET			
			17	A6	80	8F	8A	000D1	11\$:	BICB2	#128, 23(R6)	1205
				50	56	D0	000D6		MOVL	R6, R0		1207
					04	000D9			RET			1209

; Routine Size: 218 bytes, Routine Base: \$CODE\$ + 0000

: 221 1210 1  
: 222 1211 1 END  
: 223 1212 0 ELUDOM



## PSECT SUMMARY

```

:      Name                Bytes                Attributes
: $CODE$                  218 NOVEC,NOWRT, RD , EXE,NOSHR, LCL, REL, CON,NOPI,ALIGN(2)
:
```

## Library Statistics

File	-----	Symbols	-----	Pages Mapped	Processing Time
	Total	Loaded	Percent		
_\$255\$DUA28:[SYSLIB]LIB.L32;1	18619	42	0	1000	00:01.9

## COMMAND QUALIFIERS

```

:      BLISS/CHECK=(FIELD,INITIAL,OPTIMIZE)/LIS=LIS$:GETFIB/OBJ=OBJ$:GETFIB MSRC$:GETFIB/UPDATE=(ENH$:GETFIB)
:
```

```

: Size:          218 code + 0 data bytes
: Run Time:      00:18.3
: Elapsed Time:  00:37.0
: Lines/CPU Min: 3984
: Lexemes/CPU-Min: 49673
: Memory Used:  237 pages
: Compilation Complete
:
```



0170

AH-BT13A-SE  
VAX/VMS V4.0

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